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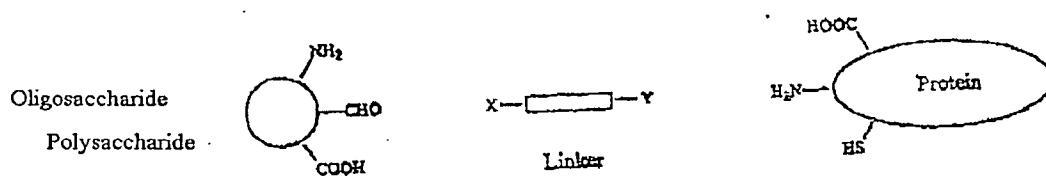
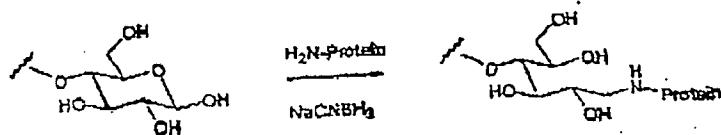
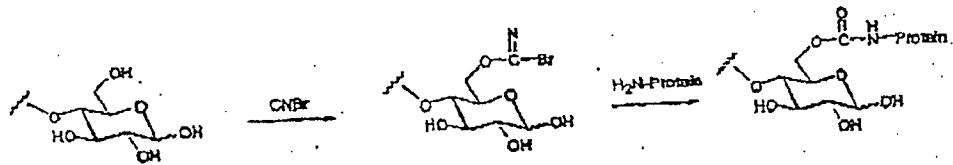


Fig. 1: Neoglycoprotein synthesis

a) Reductive amination

5 b) I₂ oxidation

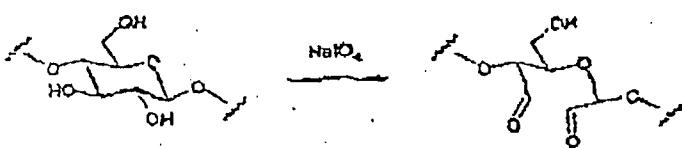
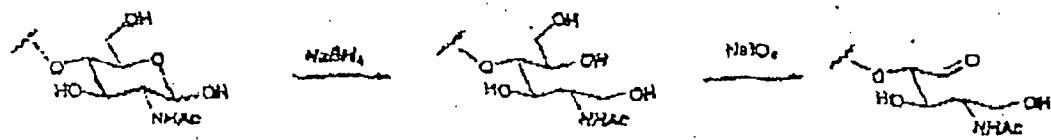
c) CNBr activation



Alternative: activation with CDAP

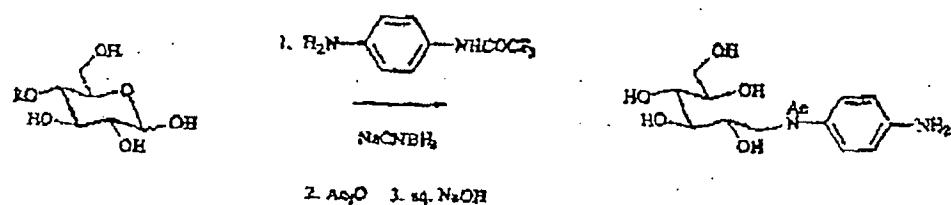
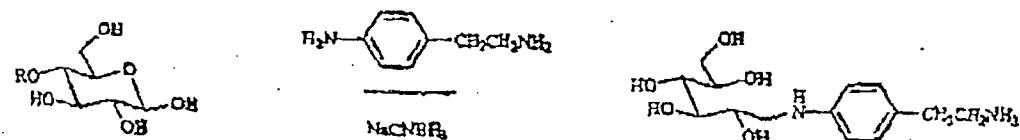
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d) NaIO4 cleavage



15 Fig. 2.1: Polysaccharide modification

a) Reductive amination



5. b) N-glycosylation

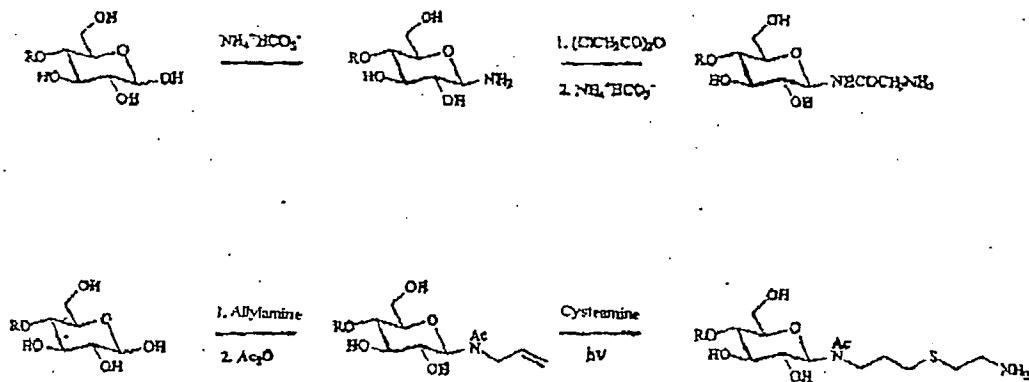


Fig. 2.2: Oligosaccharide modification

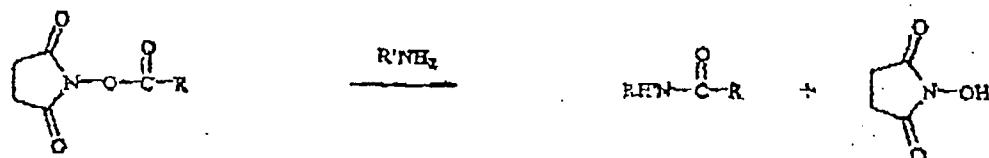
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1a: N-Hydroxysuccinimides



5 1b: Imido esters



1c: Aryl azides



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2: Hydrazides

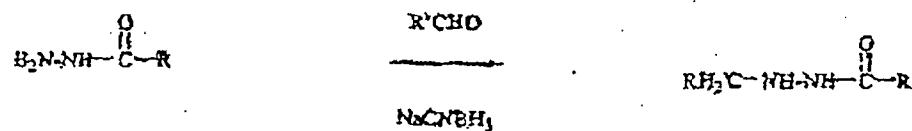
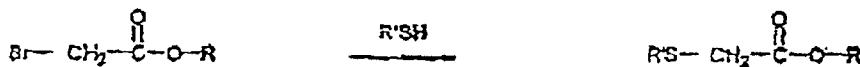


Fig. 3.1

Fig. 3: NH₂ and CHO/COOH coupling reactions

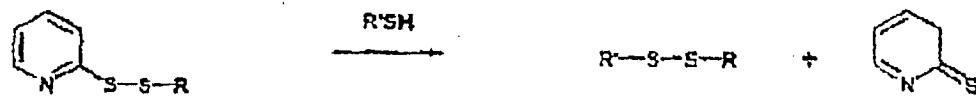
3a: Haloacetates



5 3b: Maleimides



3c: Pyridyl disulfides



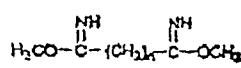
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Fig. 3.2

Fig. 3: SH coupling reactions

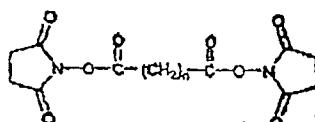
1: Homobifunctional

a)



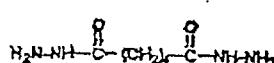
DMA ($n = 4$)
 DMP ($n = 5$)
 DMS ($n = 6$)

b)



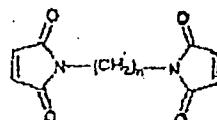
DSG ($n = 3$)
 DSS ($n = 6$)

c)



ADH

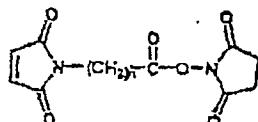
d)



SMOE ($n = 2$)
 BMB ($n = 4$)
 BMH ($n = 6$)

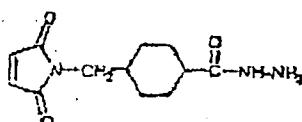
2: Heterobifunctional

a)

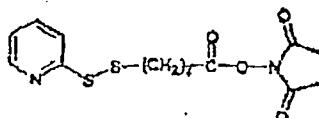


AMAS ($n = 1$)
 GMBS ($n = 3$)
 EMCS ($n = 5$)

b)

 $\text{M}_2\text{C}_2\text{H}$

c)

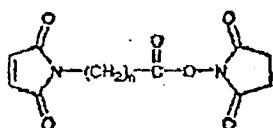


SPDP

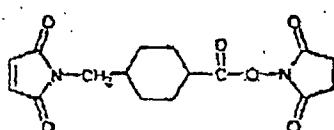
Fig. 4: Crosslinkers

1: Maleimide

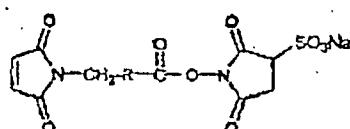
a)



AMAS ($n = 1$)
GMBS ($n = 3$)
EMCS ($n = 5$)

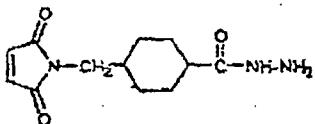


SMCC



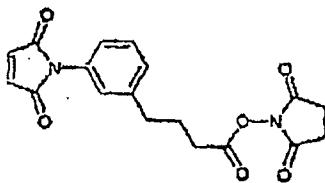
Sulfo-GMBS
Sulfo-EMCS
Sulfo-SMCC

b)

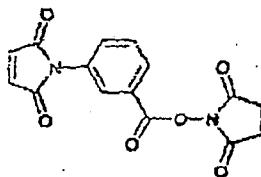


M2C2H

c)



SMPB



MBS

5 Fig. 5: Linkers for SH couplings

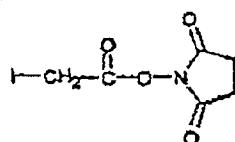
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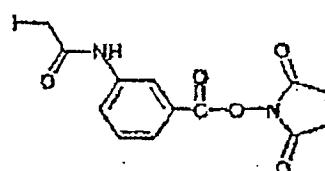
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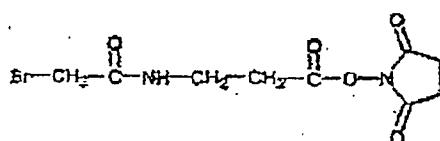
2: Haloacetate



SIA

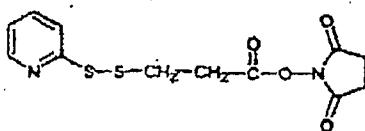


SIAB

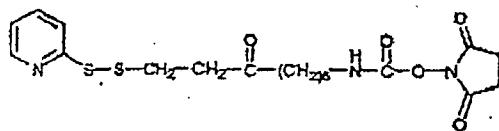


SBAP

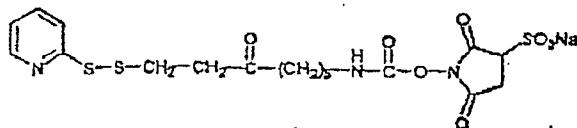
5 3: Pyridyl disulfide



SPDP



LC-SPDP



Sulfo-LC-SPDP

Fig. 5: Linkers for SH couplings